



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,088		01/27/2004	Louis J. Lundell	CS23263RL	2202
20280	7590	02/13/2006		EXAMINER	
MOTORC			HAQ, MOHAMMAD AAMIR		
600 NORTH US HIGHWAY 45 ROOM AS437 LIBERTYVILLE, IL 60048-5343				ART UNIT	PAPER NUMBER
				2642	
				DATE MAILED: 02/13/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		A !: A! A!-	A 1: A/-)				
		Application No.	Applicant(s)				
		10/766,088	LUNDELL ET AL.				
(	Office Action Summary	Examiner	Art Unit				
		Aamir Haq	2642				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠ Re	sponsive to communication(s) filed on 28 Ju	<u>ly 2005</u> .					
2a)∏ Thi	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
<i>,</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
clo	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition	of Claims						
4a) 5)□ Cla 6)⊠ Cla 7)□ Cla	aim(s) 1 - 22 is/are pending in the application  Of the above claim(s) 2,3,7 and 13-22 is/are  aim(s) is/are allowed.  aim(s) 1, 4-6 and 8 - 12 is/are rejected.  aim(s) is/are objected to.  aim(s) are subject to restriction and/or	e withdrawn from consideration.					
Application Papers							
10)⊠ The App Rep	e specification is objected to by the Examine e drawing(s) filed on 27 January 2004 is/are: plicant may not request that any objection to the oplacement drawing sheet(s) including the correction or declaration is objected to by the Examine.	a) $\square$ accepted or b) $\square$ objected drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority und	er 35 U.S.C. § 119		1				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
2) Notice of 3) Information	References Cited (PTO-892) Draftsperson's Patent Drawing Review (PTO-948) on Disclosure Statement(s) (PTO-1449 or PTO/SB/08) v(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal P 6) Other:					

Application/Control Number: 10/766,088 Page 2

Art Unit: 2642

١

### **DETAILED ACTION**

1. This action is in response to applicant's restriction election filed on 7/28/2005.

Applicant elected group I, claims (claims 1, 4 - 6 and 8 – 12), without traverse for further prosecution in this application. Claims 1 - 22 are now pending on this application.

Claims 2, 3, 7 and 13 – 22 are withdrawn from consideration.

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 recites the limitation "the reflective ring". There is insufficient antecedent basis for this limitation in the claim. Correction is required.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1, 4, 5, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,254,249 (Kim et al.), hereinafter Kim.

As to claim 1, Kim discloses a mobile communication device, comprising:

a housing (10 or 12 in figs. 1, 2, 3);

Application/Control Number: 10/766,088

Art Unit: 2642

 a mobile communication device numeric keypad coupled to the housing, the mobile communication device numeric keypad having an external visible portion (20 in fig. 3);

Page 3

a light source coupled to the housing (14-1, 14-2, 14-3, 14-4, 15 and 19 in figs. 1
 3) the light source dedicated to direct light substantially directly at the external visible portion of the mobile communication device numeric keypad to illuminate the mobile communication device numeric keypad (fig. 7, col. 4 lines 27 – 31).

As to claim 4, Kim has been discussed above. In addition, Kim discloses the mobile communication device further comprising:

- a first housing (fig. 1 and 3). Note that the first housing is not specifically numbered in the drawings of Kim. However, it is interpreted that the first housing is the part of the clamshell configuration phone with the keypad. The second housing (12 in fig. 3) is the part of the clamshell configuration phone that includes the display.
- a hinge coupled to the first housing (18 in fig. 3).
- a second housing (12) coupled to the hinge (18), wherein the mobile communication device numeric keypad (20) is coupled to the first housing and wherein the light source (19 or 14-3 or 14-2 in fig. 3) is coupled to the second housing

As to claim 5, Kim further discloses the mobile communication device comprising:

a display coupled to the second housing (50 in fig. 3);

Application/Control Number: 10/766,088

Art Unit: 2642

• a speaker coupled to the second housing (40 in fig. 3).

As to claim 10, Kim has been discussed above. In addition, Kim discloses the mobile communication device further comprising:

- a first housing (fig. 1 and 3). Note that the first housing is not specifically
  numbered in the drawings of Kim. However, it is interpreted that the first housing
  is the part of the clamshell configuration phone with the keypad. The second
  housing (12 in fig. 3) is the part of the clamshell configuration phone that includes
  the display.
- a hinge section (18) coupled to the first housing, the hinge section including pivot housing. Note, that the pivot housing is inherent to the clamshell type casing.
- a second housing (12) coupled to the hinge section (18) wherein the mobile communication device numeric keypad (20) is coupled to the first housing and wherein the light source (19 or 14-3 or 14-2 in fig. 3) is coupled to the pivot housing (18)

As to claim 11, Kim has been discussed above. In addition, Kim discloses the mobile communication device further comprising:

- a first housing (fig. 1 and 3).
- a hinge section (18) coupled to the first housing, the hinge section including pivot housing. Note, that the pivot housing is inherent to the clamshell type casing.
- a second housing (12) coupled to the hinge section (18), the second housing
  including a second housing hinge section (18) including the light source (19), the
  second housing hinge section configured to expose the light source external to

Application/Control Number: 10/766,088

Art Unit: 2642

the mobile communication device when the first housing is closed against the second housing (fig. 6).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over 6,254,249 (Kim et al.) in view of US 2002/0177467 (Hsu).

As to claims 6 and 12, Kim has been discussed above. Kim does not disclose expressly that the light source comprises a laser pointer or one of an incandescent light source and a light emitting diode light source (LED). However, Hsu discloses that a light source within a mobile device may be a bulb, LED, laser beam emitter or other suitable device (Abstract, ¶0003, 0013 of Hsu).

Kim and Hsu are analogous art because they are directed toward the same problem solving area, namely illuminating in mobile devices. At the time of the invention it would have been obvious to a person ordinary skill in the art to use an incandescent light, LED or laser beam in view of the teachings of Hsu in the mobile communication device of Kim. The motivation for doing so would have been because Kim uses a plurality of "illuminating devices" (14-1, 14-2, 14-3, 14-4, 15 and 19 in figs. 1 – 3). It would have been obvious to use LEDs or incandescent as the illuminating devices since

Application/Control Hum

Art Unit: 2642

these are the notoriously old and well known light sources. A laser beam would enable a user to use the phone as a pointer (¶0003, 0013, 0014 of Hsu). The configuration of Kim would be perfect for laser beam pointer as shown in fig. 6 of Kim. Therefore, it would have been obvious to combine Hsu with Kim to obtain the invention as specified in claims 6 and 12.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over 6,254,249 (Kim et al.) in view of US 6,336,727 (Kim), hereinafter Moon Kim.

As to claim 8, Kim has been discussed above. In the interest of compact prosecution the office is interpreting the reflective ring as a reflective type material that covers the light source. Kim does not disclose expressly that a reflective ring covers the light source. However, Moon Kim discloses a reflective ring covers the light source (Abstract, col. 1 line 63- 67, col. 5 lines 37 – 41, col. 8 lines 26 – 29 of Moon Kim).

Kim and Moon Kim are analogous art because they are directed toward the same problem solving area, namely illuminating in mobile devices. At the time of the invention it would have been obvious to a person ordinary skill in the art to use reflective ring covering the light source in view of the teaching of Moon Kim. The motivation for doing so would have been to reflect light outwardly across the surface of the keypad and to intensify the light (Abstract, col. 1 line 63- 67, col. 5 lines 37 – 41, col. 8 lines 26 – 29 of Moon Kim). It is a well-known design goal to provide the maximum amount of light from a light-emitting device while using minimal power. This reflective cover achieves this goal without consuming additional power.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over 6,254,249 (Kim et al.) in view of US 2003/0107554 (Motegi)

As to claim 9, Kim has been discussed above. Kim does not disclose expressly that the keypad comprises an opaque numeric keypad. However, Motegi discloses an opaque numeric keypad (¶0030 of Motegi).

Motegi and Kim are analogous art because they are from the same filed of endeavor, namely input devices. At the time of the invention it would have been obvious to a person of ordinary skill in the art to use an opaque numeric keypad in view of the teachings or Motegi. The motivation for doing so would have been because Kim had to use either a transparent, translucent or opaque keypad. All three types are notoriously old and well known in the art. Almost all ordinary home phones and many mobile phones use opaque keypads. It is a design choice as to which type of keypad is better suited for the design of the phone. Therefore, it would have been obvious to use opaque keypads to obtain the invention as specified in claim 9.

#### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 2003/0099116 (Nousiainen) discloses an illumination system for an electronic device. US 5,815,225 (Nelson) discloses a lighting apparatus for a portable computer. US 5,684,516 (Decker) discloses an electronic luminescence keyboard system for a portable device. US 6,726,106 (Han et al.) discloses illumination

Application/Control Number: 10/766,088 Page 8

Art Unit: 2642

for a PDA. US 5,237,607 (Diamantis) discloses a lighted telephone dial. US 2004/0085745 (Yoshihara) discloses a mobile phone with lighting method. US 2003/0100332 (Engstrom et al.) discloses luminescent signaling displays for a mobile device. US 5,901,206 (Soon) disclose a portable telephone with flashlight.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aamir Haq whose telephone number is 571-272-5511.

The examiner can normally be reached on Mon thru Fri 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.H. February 8, 2006

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2700

ahmad F. Mida